

On Solutions of the Equation  $\frac{d^2x}{dt^2} = F(x, \frac{dx}{dt})$ , by  
A. N. Cherkasov, 13 pp.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Matemat,  
No 5 (12), 1959, pp 208-218. 9092649

MDF C-119

Sci

171, 684

Oct 61

On Non-Oscillation of Solutions of Nonlinear  
Third and Fourth Order Differential Equations,  
by E. S. Chichkin, 4 pp.

RUSSIAN, per. Iz VUZ, Matem, No 5 (12), 1959,  
pp 219-221. CIA 9079403

Morris D Friedman C-120

*Math*  
Sci - ~~Chem~~  
Aug 61

<sup>3</sup>  
162,103

On the Growth of the Solution of a Class of  
Systems of Volterra Type Integral Equations,  
by E. L. Gol'dengershel', 9 pp.

RUSSIAN, per, Iz Vsykikh Ucheb Zaved, Matemat,  
No 6(13), 1959, pp 38-43.

MDF G-183  
9092762

171,530

Sci  
Oct 61

<p>Petrov, A. Z., Katiorodov, V. R., and Abdulla, V. N. THE CLASSIFICATION OF GRAVITATIONAL FIELDS OF GENERAL TYPE BY GROUPS OF MOTIONS. I (Klassifikatsiya Poley Tyagoteniya Obshchego vida po Grupпам Dvisheni, I). Apr 61 [16]p. 15 refs. RTS 1754. Order from OTS or SLA \$1.60</p> <p>Trans. of Izvestiya Vysshykh Uchebnykh Zavedeniy. Matematika (USSR) 1959, no. 6(13) p. 118-130.</p> <p>DESCRIPTORS: *Gravity, *Relativity theory. *Groups (Mathematics), *Motion.</p> <p>A survey.</p> <p>(Physics--Theoretical, TT, v. 6, no. 1)</p>	<p>61-19703</p> <p>I. Petrov, A. Z. II. Katiorodov, V. R. III. Abdulla, V. N. IV. RTS-1754 V. Department of Scientific and Industrial Research (Ox. Brit.)</p> <p>161810</p> <p>Office of Technical Services</p>
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<p>Sul'din, A. V. WIENER'S MEASURE AND ITS APPLICATIONS TO APPROXIMATION METHODS. PT. I. [1961] [26]p. 4 refs. Order from OTS or SLA \$2.60 61-14925</p> <p>Trans. of Izvestiya Vysshikh Uchebnykh Zavedeniy. Matematika (USSR) 1959, no. 6(13) p. 145-158.</p> <p>DESCRIPTORS: *Measure theory, Numerical analysis, Integration.</p> <p>(Mathematica, TT, v. 6, no. 1)</p>	<p>61-14925</p> <p>1. Title: Wiener's measure 1. Sul'din, A. V.</p> <p>161760</p> <p>Office of Technical Services</p>
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On the Problem of Stability of Relay Systems  
For Automatic Control, by Yu. I. Alimov.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Mat,  
No 1, 1960, pp 3-10. 9087322

NASA TT F-8140

Sci

6 Mar 62

US GOV'T ONLY

185,915

Qualitative Investigation of the  
Trajectories of Difference Equations  
Near a Fixed Point, by A. M. Panov,  
4 pp.

RUSSIAN, per, Izvestia Vysshikh  
Uchebnikh Zavedeni, Matematika,  
1960, No 1, pp 166-174.

ARS Journal  
Vol XXXI, No 5  
May 1961  
192,317

*see. Phys*

<p>Cherkasov, I. D. INVERSION OF INTEGRO-DIFFERENTIAL OPERATORS USING THE GREEN'S FUNCTION. [1960] 16p. 12 refs. Order from MDF \$8.50      MDF C-124</p> <p>Trans. of Izvestiya Vysshikh Uchebnykh Zavedeniy. Matematika (USSR) 1960, no. 2(15) p. 223-235.</p> <p style="text-align: center;">148,612</p>	<p style="text-align: center;">61-12544</p> <p>I. Operators(Mathematics)-- Theory 2. Title: Green functions I. Cherkasov, I. D. II. MDF C-124 III. Friedman, Morris D., Inc., West Newton, Mass.</p> <p style="text-align: center;">Office of Technical Services</p>
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The Equivalence of Certain Homological Determinations  
in Topology, by M. F. Bokshtein, 25 pp. POST ED, TED

RUSSIAN, per, Iz Vyssh Ucheb Zaved, Matematika,  
No 3(16), 1960, pp 62-80. 9694938

FTD-MI-63-348  
NO GOV'T USE ONLY

Sci  
Oct 64

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Transformative Semigroups, by V. V. Vagner, 15 pp.  
RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Matemat,  
No 4(17), 1960, pp 36-48.  
Amer Math Soc

Sci - Math  
May 64

258,304

Simultaneous Approximation of Functions and  
Their Derivatives on the Whole Real Axis,  
by A. Timan,  
RUSSIAN, per, AN SSSR Izv., Seriya Matematicheskaya,  
Vol 24, 1960, pp 421-430.  
Dept of Navy APL/JHU T-624

Sci-Math  
Jan 71

On the Number of Classes of Ideals of a Real  
Quadratic Field, by I. Sh. Slavutskiy, 6 pp.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Matemat,  
No 4 (17), 1960, pp 173-177.

MDF S-174  
9093150  
148631

Sci  
Nov 61

61-10636

Chichkin, Ye. S.  
ON ONE NON-OSCILLATIONAL THEOREM FOR  
THE LINEAR SELF-CONJUGATED DIFFERENTIAL  
EQUATION OF FOURTH ORDER. [1960] [9]p. 4 refs.  
Order from LC or SLA mi\$1.80, ph\$1.80 61-10636

- 1. Differential equations--
- Analysis
- 1. Chichkin, Ye. S.

Trans. of Izvestiya Vysshikh Uchebnykh Zavedeniy,  
Matematika (USSR) 1960, no. 4(17) p. 206-209.

151457

An investigation is made of the equation

$$L[y] = \frac{d^4y}{dx^4} + \frac{d}{dx} \left( p(x) \frac{dy}{dx} \right) + q(x)y = 0$$

with the continuous coefficients  $p(x)$  and  $q(x)$  in the  
interval  $(a, b)$ .

Office of Technical Services

(Mathematics, TT, v. 5, no. 8)

Automorphisms of Semigroups of Topological Mappings,  
by L. M. Gluskin, 12 pp.  
RUSSIAN, per, Iz Vysshikh Ucheb ~~M~~ Zaved Matemat,  
No 6(19), 1960, pp 62-73.  
Amer Math Soc

Sci - Math  
May 64

258,306

Hall -Bases of Finite Groups, by P. A. ~~Galek~~ Gol'berg,  
10 pp.  
RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Matemat,  
No 1(20), 1961, pp 36-43.  
Amer Math Soc

Sci - Math  
May 64

258,302

(NY-6491)

The Problem of the Existence of Optimal  
Trajectories of Nonlinear Systems, by F. M.  
Kirillova, 20 pp.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved,  
Matemat., No 2, Mar-Apr 1961, pp 41-53.

JPRS 9644

Sci - Math  
Aug 61

3  
162,100

Boundary Problem for Linear Integro-  
Differential Equations of Volterra Type for  
Decaying Boundary Conditions, by Yu. K.  
Lando, 10 pp.

RUSSIAN, see, *In Vysshikh Ucheb. Metod. Material.*  
(no 3(22)), 1961, pp 56-65.

MRB 1-140  
9092570

Sci  
Nov 61

173,326

The Circular Motions of Coupled Pendulums. II,  
by V. S. Serebryakova, Ye. A. Barbashin, 9 pp.

RUSSIAN, par, Iz Vysshikh Ucheb Zaved, Matemat,  
No 4, 1961, pp 112-118. 9667799

FID-TT-62-1089

Sci-Math  
Mar 63

223,670

An Analogue of the Theorem of Laurent Schwartz,  
by G. E. Silov,  
RUSSIAN, per, Izv. VUZ Matematika, No 4, (23),  
1961, pp 137-147.  
Am Math Soc  
Ser 2, Vol 60

May 67

326,182

On the Solution of Equations in Functional  
Derivatives, by A. N. Sorstnev,  
RUSSIAN, per, Izv. VUZ Matematika, No 6, (25),  
1961, pp 155-168.  
Am Math Soc  
Vol LIV, Ser 2

Jan 67

316,790

(NY-1880)

SOME PROBLEMS IN THE THEORY OF OPTIMUM  
CONTROL, BY F. M. KIRILLOVA, 21 PP.

RUSSIAN, PER, IZ VYSS UCHEB ZAVED, MATEMATIKA,  
NO 3, 1962, PP ~~40-58~~.

SCI - PHYS

AUG 62

JPRS 14826

*CIA/PDD XX-1052  
Not Releasable to Foreign NTIs  
USIB Internal Use Only*

207,080

An Indirect Control System, by R. A.  
Spasskiy, 10 pp.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved Matemat,  
No 4 (29), 1962.

JPRS 15600

Sci - Electron  
Oct 62

*215,604*

Coordinate Spaces and Infinite Systems of Linear  
Equations.      II, by Y. I. Gribanov, 13 pp.  
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Matemat,  
No 1 (32), 1963, pp 66-74. 9692085  
DDC RSIC-140

Sci - Math & Data Process  
Apr 64

253,311

Sarkova, N. V.  
THE APPROXIMATE SOLUTION, BY THE METHOD  
OF OSCILLATING FUNCTIONS, OF INTEGRO-DIF-  
FERENTIAL EQUATIONS AND DIFFERENTIAL EQUA-  
TIONS WITH LAGGING ARGUMENT. [1963] [18p]

Srefs

Order from OTS or SLA \$1.60

63-20188

Trans. of Izvestiya Vysshikh Uchebnykh Zavedenii,  
Matematika (USSR) 1963, no. 1(32) p. 158-168.

DESCRIPTORS: \*Numerical methods and procedures,  
\*Functions, \*Integral equations, Integration, \*Dif-  
ferential equations, Time-lag theory, Numerical analy-  
sis, Errors.

A method is presented which extends the application of  
the method of oscillating functions to the solution of  
integro-differential equations with lagging argument  
(Mathematics, TT, v. 10, no. 10) (over)

63-20188

1. Title: Oscillating functions  
I. Sarkova, N. V.

Office of Technical Services

Yakubov, I. T.

AN ASYMPTOTIC EXPRESSION FOR THE GENERALIZED LAGUERRE POLYNOMIALS. [1963] [7]p. 7 refs. Order from OTS or SLA \$1.10

63-18371

Trans. of *Izvestiya Vysshikh Uchebnykh Zavedeni, Matematika (USSR)* 1963, no. 1(32) p. 169-171.

DESCRIPTORS: \*Polynomials, Numerical analysis.

A new asymptotic expression is presented for the generalized Laguerre polynomials. The expression is derived by studying a particular solution of the Schrodinger equation for large values of the index. (Translator)

(Mathematics, TT, v. 10, no. 10)

63-18371

1. Title: Schrodinger equation  
1. Yakubov, I. T.

Office of Technical Services

Approximate Solution of Differential Equations With  
Deviating Arguments, by N. V. Sharkova, 17 pp.  
RUSSIAN, per, Iz Vyssh Ucheb Zaved, Mate, No 3,  
1963, pp 173-184. 9692126  
FTD-TT-63-1034

Sci - Math & Data Proc  
Apr 64

253,420

Inequalities for Harmonic Polynomials, by  
Ya. S. Bugrov.  
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Matemat,  
No 5, 1963, pp 12-23.  
Navy Tr 3816  
APL T988

Sci - Math & Data Proces  
jun 64

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On the Method of Successive Approximations, by  
Ye. P. Glebov, A. A. Potapenko.  
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Matemat,  
No 5, 1963, pp 39-42.  
NASA TT F-8739

Sci-Math

Jul 64

U.S. GOVERNMENT ONLY

262,888

On the Existence and Uniqueness of a Periodic  
Solution to a Single Nonlinear Equation of a Hyperbolic  
Type, by V. N. Karp,  
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Matemat,  
No 5, 1963, pp 43-50,  
NASA TT F-8737

Sci-Math  
Jul 64  
U.S. GOVERNMENT ONLY

262,891

**Solution of a Second-Order Hyperbolic Differential  
Equation by Reducing It to a System of Integral  
Equations, by T. V. Chekmarev.**

**RUSSIAN, per, Iz Vysishikh Ucheb Zaved Matemat,  
No 5, 1963, pp 146-152.**

**Navy Tr 3837/APL T1026**

**NASA-TT-F-8738 (Government Use Only.)**

**Sci - Math & Data Process  
Jul 64**

**262,950**

On a Differential-functional Equation in  
Partial Derivatives, by V. R. Petukhov.  
RUSSIAN, per, Iz VUZ, Matemat, No 1(38), 1964,  
pp 96-99.  
Dept of Navy Tr 4337 /APL No T-1480

Sci - Math  
Nov 65

292,907

Two Theorems of the Theory of a Linear  
Homogeneous Differential Equation, by  
F. A. Mikhailov.  
RUSSIAN, per, Iz Vysakh Ucheb Zaved Matemat,  
No 2, 1964, pp 120-126.  
Navy Tr 3879/APL T1062

Sci - Phys  
Sep 64

266,291

Criteria for the Boundedness of Solutions  
of Systems of Ordinary Differential Equations,  
by I. M. Vlasov.  
RUSSIAN, per, Iz VUZ, Matemat, No 3(40),  
1964, pp 1964, pp 39-42.  
Dept of Navy Tr 4351/APL No T-1515

Sci - Math  
Dec 65

292,780

Singular Integrals Close to the Weierstrass Integral  
and an Associated Fourier Series Summation Method,  
by L. P. Lebedeva  
RUSSIAN, per, Iz Vych Ucheb Zaved, Matemat, Vol XL,  
No 3, 1964, pp 75-83.  
Dept of Navy 4117/APL-JHU T 1278

Sci - Phys  
Jun 65

279,613

Some Problems in the Theory of Approximating  
Solutions of Differential-operator Equations in  
Hilbert Space, by L. Kh. Liberman.  
RUSSIAN, per, Izvestiya VUZ, Matematika, No 3(40)  
1964, pp 88-92.  
Dept Navy APL/JHU TG230-T508  
Navy tr 5190

Sci/Mathematical Sci  
Mar 67

318,529

On the Absence of Periodic Solutions Taking the  
Value  $x = 0$  in a Class of Differential Equations of  
the Type  $x' + x = F(x, x)$ , by G. E. Popov.  
RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Matemat, No 3,  
1964, pp 120-122.  
Navy 4004/APL T-1181

Sci-Math  
Feb 65

274,209

Some Properties of the Cauchy Function,  
by R. G. Aliev.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh  
Zavedenii. Matematika, No 4, 1964, pp 9-11.  
NTC-71-14945-12A

Navy APL/JHU T-632

Feb 72

On Summation of Sequences, by B. I. Golubov.  
RUSSIAN, per, Izv VUZ. Matematika, No 4(41), 1964,  
pp 47-55.  
Dept of Navy APL/JHU Tr CLB-3 T-646

April 71

Dynamic Problem of the Theory of  
Elasticity for a Plate From Transversal  
Isotropic Material, by V. I. Makhovikov,  
12 pp.

RUSSIAN, per, Iz Vyssh Ucheb Zaved  
Mate, No 4, 1964, pp 111-117. 9699402  
FTD-TT-65-874

Sci - Phys  
Feb 66

294,765

**A Method of Approximating Differentiable Functions  
by Trigonometric Polynomials, by N. M. Pavlovskii,  
RUSSIAN, per, VUZ, Izv., Matematika, No 4(41),  
1964, pp 118-125,  
Dept of Navy APL/JHU T-634**

**Sci-Math  
Jan 71**

The Solution of Two Problems in Applied  
Mathematics by Means of Special Approxim-  
ating Polynomials, by I. I. Eterman.

RUSSIAN, per, Izvestiya Vysshikh  
Uchebykh Zavedeni. Matematika, No 4,  
1964, pp 169-176.

NTC 72-10425-12A

\* DEPT OF NAVY JHU/APL CLS-3T-636

Apr 72

287,331

On the Question of Specific Criteria for Estimates  
of the Lengths of Subcritical Intervals, by R. G. Aliyev,  
6 pp.  
RUSSIAN, per, Iz Vych Ucheb Zaved, Matematika,  
No 5(42), 1964, pp 3-7.  
CIA/FDD X-5510

Sci - Math & Data Proc  
Jan 65  
FOR OFFICIAL USE ONLY

270,488

On the Existence of Upper and Lower Solutions of the  
Cauchy Problem of a Second Order Differential  
Equation, by S. A. Pak, E. S. Chichkin, 5 pp.  
RUSSIAN, per, Iz Vych Ucheb Zaved, Matematika,  
No 5(42), 1964, pp 91-94.  
CIA/FDD X-5509

Sci - Math & Data Proc  
Jan 65  
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On the Possible Form of a General  
Solution to Equilibrium Equations in  
Curvilinear Coordinates, by V. N. Ionov,  
G. A. Vvedenskiy, 10 pp.  
RUSSIAN, per, Iz Vyssh Ucheb Zaved,  
Matemat, No 6, 1964, pp 59-66. 9698950  
FTD-TT-65-931

Sci - Math & Data  
Feb 66

296,390

**Cavitational Flow Around a Plane Plate, by  
A. G. Terent'yev.  
RUSSIAN, per, Izvestiya Vyssh Ucheb Zaved,  
Matematika, No 6, 1964, pp 1591-167.  
\*FTD TT-65-1070**

**Sci-Phys  
D41 65**

Cavitational Flow Past a Flat Plate, by  
A. G. Terent'yev, 11 pp.  
RUSSIAN, per, Iz Vyssh Ucheb Zaved, Matemat.  
No 6, 1964, pp 159-167. 9698950  
FTD-TT-65-931

Sci - Math & Data Proc  
Feb 66

296,391

NEFT, GAZ

Iz. V. U. Z. Neft i GAZ

Galuzo, Yu. V.  
ON THE POSSIBILITY OF THE QUANTITATIVE DE-  
TERMINATION OF BORON IN ROCKS BY THE  
NEUTRON GAMMA METHOD. [1963] [6]p.  
Order from OTS or SLA \$1.10 63-16989

Trans. of Izvestiya Vysshikh Uchebnykh Zavedeni,  
Neft' i Gaz (USSR) 1958, v. 1, no. 1, p. 41-44.

DESCRIPTORS: \*Rock (Geology), \*Boron, Neutrons,  
Gamma rays, \*Radiometers, Radioactivation analysis.

(Earth Sciences--Geology, TT, v. 10, no. 8)

63-16989

I. Galuzo, Yu. V.

Office of Technical Services

Filtration Towards a Horizontal Wall of Finite  
Length in a Layer of Finite Thickness, by V. P.  
Merkulov, 11 pp.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved Nart i Gaz,  
No 1, 1958, pp 73-80.

SLA 60-10968

Sci  
Jun 60  
Vol III, No 5

119,116

On the Parameters of Similitude at the Displacement  
of One Liquid by Another and on the Influence of  
Flow-Rate on the Petroleum Recovery, by S. N.  
Buzinov, 6 pp.

RUSSIAN, par, IZ Vysshikh Ucheb Zaved Neft i Gaz,  
No 1, 1958, pp 81-87.

SLA 60-10989

119,165

Sci  
Jun 60  
Vol XII, No 5

A New Method for the Determination of the Effect of  
~~the weight~~ and Its Speed on Drilling Rate, by  
V. G. Yancy, 4 pp.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved Neft i Gaz,  
Vol II, No 3, 1959, pp 51-54.

ATB-41134R

Sci  
Jun 60  
Vol III, No 5

119,141

Development of Special Grades of Carboxymethylcellulose (CMC) to Improve the Quality of Drilling (Clay) Muds and Improvement in the Technology of their Production, by K. F. Zhigach, M. Z. Finkel'shtain, T. A. Tibilova, 9 pp.

RUSSIAN, per, Izvest Vyschikh Uchebnykh Zavedeniy  
Neft i Gaz, No 6, 1958, pp 31-38.

ATS-4813CR

Sci - Engr  
Sep 59  
Vol 2, No 1

97899

On the Problem of Production of Synthetic Fuels,  
by M. G. Mamedli, M. S. Aliyev, 6 pp. UNCL

RUSSIAN, per, Iz Vysshikh Uchebnykh Zavedeniy,  
Neft i Gaz, No 6, 1958, pp 73-76.

AF 1255883

USSR  
Econ  
Sci - Fuels  
Aug 59

93,387

The Study of the Lithology of Rocks Forming Bore-  
Hole Profiles From Self-Potential Data, 6 pp.

RUSSIAN, per, Iz Vysshikh Uchebnykh Zavedeniy,  
Neft' i Gaz, No 7, 1958, pp 11-15.

ATS 49130R

Sci  
Dec 59  
Vol 2, No 5

ATS 83-109

103,645

Korneev, Y. and Skoblo, A.  
THE EFFECT OF PRESSURE ON RELATIVE VOLA-  
TILITY IN PROCESSES OF EXTRACTIVE DISTIL-  
LATION. [1961] 9p.

Order from ATS \$10.75

ATS-41N57R

Trans. of Izvestiya Vysshikh Uchebnykh Zavedenii.  
Neft' i Gaz (USSR) 1958, v. 1, no. 7, p. 57-65.

DESCRIPTORS: Pressure, Evaporation, \*Petroleum.

RJ-3304

(Engineering--Chemical, TT, v. 7, no. 6)

62-12350

- I. Korneev, Y.
- II. Skoblo, A.
- III. ATS-41N57R
- IV. Associated Technical  
Services, Inc.,  
East Orange, N. J.

Office of Technical Services

Finogenov, I. S.  
THE EFFECT OF MAJOR FACTORS ON THE  
HARDNESS OF ARGILLACEOUS CARBONATE  
ROCKS. [1961] 5p.  
Order from ATS \$7.55

ATS-29NS2R

Trans. of Izvestiya Vysshikh Uchebnykh Zavedenii  
Nest' i Geol (USSR) 1958, v. 1, no. 8, p. 41-46.

DESCRIPTORS: \*Rock, Hardness, Clays.

(Earth Sciences--Geology, TT, v. 6, no. 6)

61-25056

- I. Finogenov, I. S.
- II. ATS-29NS2R
- III. Associated Technical  
Services, Inc., East  
Orange, N. J.

176720

Office of Technical Services

On the Effect of the Bright Strip Upon the  
Strength of the Weld Metal in Resistance  
Bett Welding, by A. N. Dzhefarov. UNCL

RUSSIAN, PSP, Iz VUZ: Hert 1 Gos, No 8,  
1958, pp 115-119.

DSIR LLU RTS 1264

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LH

SLH

60.15730

Sci - Engr; Min/Wet  
Feb 60

107,210

Sep 17, 1958.

"An Inter-Vus Scientific-Technical Conference

[On New Types of Motor Fuels]" (unsigned article);

Baku, Izvestiya Vysshikh Uchebnykh Zavedeniy - Neft'

i Gaz, No 7, Jul 58, p 16.

SIR No 17 (7)

Application of the pH Method for Differentiation of  
Carbonate Intervals in Oil Fields, by Y. M. Mironi-  
chenko, 7 pp.

RUSSIAN, Iz Vyznanih Uchebnykh Zavedeniy, Ser' 1  
Gaz, No 8, 1958, pp 17-23.

ATS 50130R  
HTS-RJ 1108

Sci  
Dec 59  
Vol 2, No 5

103,807

Polyakov, G. G.  
EXPERIMENTAL STUDIES OF PERFORATED CASED  
WELLS USING A RADIAL MODEL WITH A HOMO-  
GENEOUS POROUS MEDIUM. [1961] 7p.  
Order from ATS \$8.60                      ATS-53N54R

Trans. of Izvest[iya] Vysshikh Ucheb[nykh] Zavedeni.  
Nef' i Gaz (USSR) 1958, v. 1, no. 10, p. 63-68.

DESCRIPTORS: \*Porous materials, \*Wells, \*Petro-  
leum.

(Earth Sciences--Geology, TT, v. 7, no. 4)

61-25623

I. Polyakov, G. G.  
II. ATS-53N54R  
III. Associated Technical  
Services, Inc., East  
Orange, N. J.

Office of Technical Services

Certain Theoretical Aspects of the Origin of  
Petroleum and the Formation of Oil Deposits,  
by S. M. Apresov, 3 pp.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Neft' i  
Gaz, Vol II, No 3, 1959, pp 3-4.

ATS-08M39R

Sci  
Feb 62  
Vol III, No 11

182,811

Dynamics of Vertical Displacements in Three-  
Cutter Bits with Impact-Action Teeth, by H. A.  
Gazarov. UNCL

RUSSIAN, per, Iz Vyschikh Ucheb Zaved, Reft 1  
Gen, Vol II, 1959, pp 27-33.

ATS RJ-1755

Sci - Engr  
Dec 59

103,495

A Study of the Effect of the Chief Natural  
Factors on the Hardness of Sandstones and  
Siltstones, by I. S. Finogenov. UNCL

RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Neft i  
Gaz, No 2, 1959, pp 47-52.

ATS RJ-1760

Sci - Geophysics

Dec 59

103,506

Effect of Pressure on the Capillary Dis-  
placement of a Hydrocarbon Liquid From a  
Porous Medium by Water, by A. A. Kocheshkov.  
UNCL

RUSSIAN, per, Izvest Vysshikh Ucheb. Zaved.,  
Neft i Gaz, No 2, 1959, pp 59-65.

ATS RJ-1822

Flyu  
Sci - ~~Geology~~  
Jan 60

104,574

Mamedli, M. G. and Alev, M. S.  
SYNTHETIC FUELS PRODUCTION TECHNOLOGY  
(K Voprosu o Tekhnologii Proizvodstva Sinteticheskikh  
Topliv). [1961] [12]p. 5 refs. AF 1419499.  
Order from OTS or SLA \$1.60

61-28351

Trans. of [Izvestiya Vysshikh Uchebnykh Zavedenii].  
Nefr' i Gaz (USSR) 1959 [v. 2] no. 2, p. 67-74.

DESCRIPTORS: Industrial production, Chemical analy-  
sis, \*Jet engine fuels, Fractionation, \*Hydrocarbons,  
Decomposition, Aluminum compounds, Chlorides,  
Catalysis, Catalysts, Distilling plants, Temperature,  
Pyrolysis, \*Fuels.

Tests showed that it is possible to produce high quality  
T-1 jet fuel from the middle fractions of light thermal  
cracking products. The established optimum conditions  
for catalytic conversion of the hydrocarbons contained  
(Engineering--Chemical, TT, v. 7, no. 7) (over)

61-28351

- I. Title: T-1 fuel
- I. Mamedli, M. G.
- II. Alev, M. S.
- III. AF-1 419 499

Office of Technical Services

63-17118

Litvinov, S. Ya. and Sarkisov, I. K.  
CONTRIBUTION TO THE THEORY OF USING PIPE  
AS AN ELECTRICAL COMMUNICATION CHANNEL.  
[1963] 8p.  
Order from ATS \$9.65                      ATS-04068R

Trans. of Izvestiya Vysshikh Uchebn[ykh] Zavedeni.  
Neft' i Gaz (USSR) 1959, v. 2, no. 2, p. 99-105.

DESCRIPTORS: \*Pipes, Transmission lines, Com-  
munication equipment, Theory, Ducts.

(Engineering--Electrical. TT, v. 10, no. 1)

- I. Litvinov, S. Ya.
- II. Sarkisov, I. K.
- III. ATS-04068R
- IV. Associated Technical  
Services, Inc.,  
East Orange, N. J.

Office of Technical Services

Relationship Between Rotational Speed and  
Weight on Bit in Turbodrilling Providing  
Efficient Rock Disintegration, by V. S. Fedorov.  
UKCL

RUSSIAN. par. Iz Vysshikh Ucheb Zaved. Neft i  
Gaz, No 3, 1959, pp 39-41.

ATS RJ-1777

Sci - Engr  
Doc 59

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A Hydraulic Investigation of Sand Ingression  
During Multizone Completion, by G. S. Gazaryan.  
UNCL

RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Noft 1 Gaz,  
No 3, 1959, pp 63-66.

ATB RJ-1801

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Quantitative Evaluation of Frictional Force  
During Movement of the Tool in a Deviated Hole,  
by M. M. Aleksandrov. UNCL

RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Neft i  
Gaz, Vol II, no 4, 1959, pp 41-43.

ATS RJ-1773

Sci - Engr

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Dec 59

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Crossflow of Fluids Between Two Adjacent Beds of  
Different Permeability, by G. A. Mamedov, 8 p.

RUSSIAN, per, Iz Vysishikh Ucheb-Zaved, Neft i Gaz,  
1959, Vol II, No 4, pp 49-55.

AMS-08L35R  
R-5-5700-72

Sci  
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Vol III, No 2

113,585

Relation Between the Rate of Combustion of Individual  
Hydrocarbons and Ethers and Their Structure, by  
V. V. Makarenkov, A. P. Meshcheryakov, et al, 111

RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Neft' i Gaz,  
No 4, 1959, pp 71-78.

APIC MOL-577/III

Sci - Chem

Oct 60

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Some Problems Concerning the Dynamic Penetration  
of the Teeth of a Three-Cutter Bit into Rock,  
by R. A. Badalov, 7 P.

RUSSIAN, *For*, Is Vysshikh Ucheb Zaved Neft i Gaz  
1959, Vol II, No 5, pp 31-36.

ATS-85L34R

Sci  
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Vol III, No 2

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Malofeev, G. E.  
HEAT LOSSES TO OVERLYING AND UNDERLYING  
ROCK WHEN HOT WATER IS INJECTED INTO A  
LAYER (Poteri Tepla v Kroviyu i Podostvu pri  
Zakachke v Plast Goryachel Vody). [1962] [20]p.  
(foreign text included) 4 refs.  
Order from OTS or SLA \$1.60

63-10211

Trans. of Izvestiya Vysshikh Uchebnykh Zavedeni.  
Neft' i Gaz (USSR) 1959, v. 2, no. 5, p. 37-43.

DESCRIPTORS: Thermal diffusion, Thermal utilization,  
Oils, Rock(Geology), \*Heat transfer, Numerical  
analysis, \*Water injection, \*Petroleum, Sources.

An experimental relationship between the coefficient  
of effective utilization of heat  $\eta_{\text{heat}}$  and the parameter  
 $F_0$  for plans-linear filtration was found. This coef-  
ficient decreases with time. The greater the thickness  
(Earth Sciences--Geology, TT, v. 10, no. 1) (over)

63-10211

I. Malofeev, G. E.

Office of Technical Services

Slin Bits, by S. B. Godzhayev, 8 pp.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved Neft i  
Gaz, Vol II, No 5, 1959, pp 75-78.

ATS-88L35<sup>R</sup>

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Calculation of the Rate of Infiltration of Water  
in Soil Previously Containing Air, by Chen Chzhun-  
Syan.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Neft i Gaz,  
Vol II, No 6, 1959, pp 43-51.

ATS 2328-RJ

Sci - Engr

Sep 60

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Determination of Submerged Jet Parameters in  
Hydraulic Bits, by A. K. Kozodoi,

RUSSIAN, per, Iz Vysshikh Ucheb Zaved Neft i Gaz,  
~~Max~~ Vol II, No 6, 1959, pp 103-108.

ATS 2299-RJ

Sci - Engr

Sep 60

124,889

Dating the Origin of Gas Deposit in the Berezhansk  
Area of Krasnodar Province, by K.N. Marchenko.  
RUSSIAN, per, Iz V.U.Z. Neft'iGaz, 1959, vol. 2,  
no.7, pp.9-12.  
ATS\_79R78R

ES/Astron  
Aug 66

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The Effect of Certain Vibro-Percussion Tool  
Parameters on Penetration Rate, by E. I. Tagiev,  
A. V. Kichigin,

RUSSIAN, per, Iz Vysshikh Ucheb. Zaved Neft i  
Gaz, Vol II, No 7, 1959, pp 17-24.

ATS 2294-RJ

Sci - Engr

Sep 60

124,887

Approximate Formula for the Maximum Production  
Rate of Water-Free and Gas-Free Oil From a  
Formation Carrying Bottom Water and a Gas Cap, by  
P. M. Shul'ga,

RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Neft i Gaz,  
Vol II, No 7, 1959, pp 33-40.

ATS 2327-RJ

Sci - Engr

Cap 60

124,908

Second Pressure Restoration Period in a Well  
After Its Shutting-in (With Account of the  
Inflow of Fluid, by E. I. Petrushevskiy,

RUSSIAN, per Iz Vysshikh Ucheb Zaved, Neft i  
Gaz, Vol II, No 7, 1959, pp 41-48.

ATS 2325-RJ

Sci - Engr

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Effect of Temperature on the Rheological Properties  
of Clay Suspensions, by L. D. Gurzhinyan,

RUSSIAN, per, Iz Vysakh Ucheb Zaved, Neft i Gaz,  
Vol II, No 7, 1959, pp 91-95.

ATS 2308-RJ

Sci - Engr

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Communication Channels for Subsurface Telemetering  
in Wells During Drilling and Production, by  
Z. B. El'yashevich, Yu. V. Grachev,

RUSSIAN, per, Iz Vysshikh Ucheb Zaved Neft i Gaz,  
Vol II, No 7, 1959, pp 97-102.

ATS 2314-RJ

Sci - Engr

Sep 60

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Kasimov, A. I. and Gukasov, N. A.  
ONE APPROXIMATE METHOD SOLVING THE PROBLEM OF THE CONSECUTIVE MOVEMENT OF TWO VISCOUS LIQUIDS. [1963] 5p.  
Order from ATS \$5.65

ATS-94Q67R

Trans. of Izv[estiya] Vysshikh Uchebn[ykh] Zavedenij.  
Nef' i Gaz (USSR) 1969, v. 2, no. 7, p. 103-106.

DESCRIPTORS: \*Fluid flow, \*Liquids, Viscosity.

(Machinery--Transport, TT, v. 10, no. 1)

63-17110

- I. Kasimov, A. F.
- II. Gukasov, N. A.
- III. ATS-94Q67R
- IV. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

Tooth Penetration in Rock and the Penetration Rate  
in Drilling With a Percussion Bit, by N. A.  
Gazarov,

RUSSIAN, per, Iz Vysshikh Ucheb Zaved Neft i Gaz,  
Vol II, No 8, 1959, pp 25, 26.

ATB 2303-BJ

Sci - Engr

Sep 60

*Handwritten:*  
124,892  
124,892

*Handwritten:*  
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12 471

US-14

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Izv. Vysshikh Uchebn. Zaved., Neft' i Gaz, 2, No. 8,  
55-61 (1959)

RJ-2466. \$ 10.80 - English

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*ATS/KT-2466*

Alkylation of Phenol by Olefins in the  
Presence of Boron Trifluoride Dihydrate,  
by L. A. Gilyarovskaya.  
RUSSIAN, per, Izv VUZ Neft i Gaz, No 8,  
1959, pp 63-69.  
NLL Ref: 5828.4F (12920)

Sci-Chem  
Mar 69

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Power Characteristics of Vertical Pneumatic  
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Todes, 5 pp.

RUSSIAN, per, Is Vysshikh Ucheb Zaved,  
Neft' i Gaz, Vol II, no 8, 1959, pp 109-  
113.

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Vol IV, No 11  
Jun 62

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Fr-49 US-14

PAVLOVA R. P.

Evaluation of boron content in water from its mineral  
composition

Evaluation de la teneur en bore de l'eau d'après sa composition  
minérale

Izv. Vysshikh Uchebn. Zaved., Neft' i Gaz, 2, No. 8,  
p. 126 (1959)

Fr-49: 2785 - French

US-14: RJ-2378. \$ 3.00 - English

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The Problem of Dynamic Interaction of Cone Bit  
Teeth and Rock, by V. K. Bitsuta,

RUSSIAN, per, Iz Vysshikh Ucheb Zaved Neft i  
Gaz, Vol II, No 9, 1959, pp 31-35.

ATS 2301-RJ

Sci - Engr

Sep 60

TN7 157 N0352

124,891

The Design and Arrangement of Nozzles in Jet-  
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RUSSIAN, per, Iz Vysshikh Ucheb Zaved Neft i  
Gaz, Vol II, No 9, 1959, pp 37-40x

Sci - Engr

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ATS 2300-RJ

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...tion of a Hot Liquid

Irradiation of the Formation-Heating Process During  
the Injection of Hot Fluid, by G. E. Malofeyev,

USSIAN, per, Iz Vysshikh Ucheb Zaved, Neft i Gaz,  
19, 1959, pp 49-55.

ATS 2320-RJ

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Isomerization of C<sub>15</sub>-C<sub>18</sub> n-Paraffinic  
Hydrocarbons, by Ya. M. Paushkin,  
Kh. Ya. Katsobashvili, 7 pp.

RUSSIAN, per, Iz Vysshikh Ucheb Zaved.  
Neft i Gaz, Vol II, No 9, 1959,  
pp 57-62.

ATS-36MEM4OR

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Bit With Single-Row Cutters Reducing the  
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RUSSIAN, per, Iz Vysshikh Ucheb Zaved Neft i  
Gaz, Vol II, No 9, 1959, pp 117-121.

ATB 2293-RJ

Sci - Engr

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Evaluation of the Performance of Three-Roller Bits,  
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ATS-9441R

ATS/PJ-2745

Sci

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Apr 62

Vol IV, No 6

Chernozhukov, N. I. and Rogacheva, L. M.  
CATALYTIC UPGRADING OF LUBE OIL DISTIL-  
LATES FROM CRUDES OF THE SECOND BAKU.  
[1963] 8p

Order from: ATS \$10.00

ATS-69Q73R

Trans. of Izv[estiya] Vysshikh Uchebn'nykh  
Zavedenii. Neft' i Gaz (USSR) 1959, v. 2, no. 10,  
p. 45-51.

DESCRIPTORS: \*Oils, \*Petroleum Distillation,  
Catalysts.

(Materials--Lubricants, TT, v. 11, no. 10)

TT-64-12406

- I. Chernozhukov, N. I.
- II. Rogacheva, L. M.
- III. ATS-69Q73R
- IV. Associated Technical  
Services, Inc.,  
East Orange, N. J.

Office of Technical Services